

CLAIMS

1. An electrical connector comprising:
a terminal fixed to a connector housing;
a conductor exposed from a covering and having a connection portion connected to a connection portion of the terminal;
a foam element at a predetermined foam ratio located around respective connection portions of the conductor and the terminal.
2. The electrical connector according to claim 1,
wherein the foam element includes a resin,
wherein impedance of the foam element is closer to impedance of the covering, compared with a non-foamed resin.
3. The electrical connector according to claim 1,
wherein the foam element includes a foam resin.
4. The electrical connector according to claim 1,
wherein the foam element functions as a capacitive capacitor.
5. The electrical connector according to claim 1,
wherein respective connection portions of the conductor and the terminal are located in a cavity of the connector housing,
wherein the connector housing is made of a foamed resin.
6. The electrical connector according to claim 1,
wherein the foam ratio of the foam element is greater than 0% and 80% or less.
7. The electrical connector according to claim 1,
wherein the foam element has strength to maintain a structure

thereof.

8. A method of fabricating an electrical connector, comprising:
connecting a connection portion of a terminal and a connection portion of a conductor exposed from a covering to each other; and
covering respective connection portions of the terminal and the conductor from therearound with a foam element at a predetermined foam ratio.

9. The method of fabricating an electrical connector according to claim 8,

wherein the foam element is controlled to be approximate in impedance to the covering.

10. The method of fabricating an electrical connector according to claim 8,

wherein the foam element is molded to cover respective connection portions.

11. The method of fabricating an electrical connector according to claim 8,

wherein the foam element is formed into a predetermined shape to be fitted to respective connection portions.

12. The method of fabricating an electrical connector according to claim 8,

wherein the foam element is formed as a tape to be wound around respective connection portions.

13. An electrical connector comprising:
a cable comprising:

an electrical wire including a conductor exposed from a first covering;

a drain wire arrayed parallel to the electric wire; and

a jacket holding the electric wire and the drain wire;

a connection terminal having a connection portion connected to an end of the conductor;

an earth terminal having a connection portion connected to an end of the drain wire;

a connector housing receiving the connection terminal and the earth terminal;

a foam resin located around the end of the conductor, the connection portion of the connection terminal, the end of the drain wire and the connection portion of the earth terminal; and

a second covering located around the foam resin.

14. A cable comprising:

an electric wire having a conductor exposed from a covering.

a connector including a terminal having a connection portion connected to a connection portion of the conductor and fixed to a connector housing; and

a foam element at a predetermined foam ratio located around respective connection portions of the conductor and the terminal.

15. A connector for a signal transmission cable, comprising:

a connector housing;

a terminal fixed to the connector housing;

a cable conductor electrically connected to the terminal by

welding within the connector housing; and

a foam element covering connection portions of the terminal and the cable conductor within the connector housing.

16. The connector for a signal transmission cable according to claim 15,

wherein the connection portions include a molten alloy layer.

17. The method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor to each other for connection;

preparing a foamable resin;

locating connection portions of the terminal and the cable conductor in a die;

feeding the foamable resin into the die for extrusion to cover the connected terminal and the conductor from therearound with a foam element at a predetermined foam ratio;

molding a resin for the connector housing around the terminal, the foam element, and the cable conductor exposed from the covering, thus to form a connector housing in a predetermined shape.

18. A method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor to each other for connection;

forming a pair of foam resin covering members preliminarily formed into shapes which conform to an upper half shape and a lower

half shape of connection portions of the terminal and the cable conductor;

fitting said pair of covering members around the connection portions of the terminal and the cable conductor;

molding a resin for the connector housing around the terminal, the foam resin, and the cable conductor exposed from a covering, thus to form a connector housing in a predetermined shape.

19. A method of fabricating a connector for a signal transmission cable, comprising:

welding a terminal and a cable conductor for connection;

preparing a foam resin tape;

winding the foam resin tape a predetermined number of times around connection portions of the terminal and the cable conductor to cover the connection portions;

molding a resin for a connector housing around the terminal, the foam resin tape, and the cable conductor exposed from a covering, thus to form a connector housing in a predetermined shape.